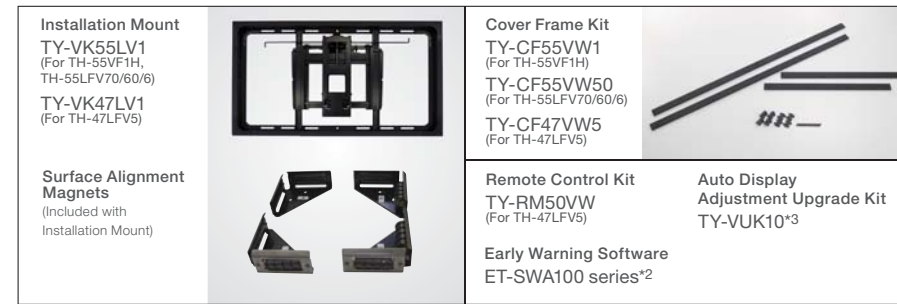


Peripheral Devices



Optional Accessories



*1 Available on LFV70/VF1H Series only. *2 Part number suffix may differ depending on the license type. *3 Supports Version 1.1 or later.

Product Specification (Design and specification are subject to change without notice)

Model No.	TH-55VF1H	TH-55LFV70	TH-55LFV60	TH-55LFV6	TH-47LFV5
DISPLAY PANEL					
Screen Size (Diagonal)	55-inch (1387 mm)				47-inch (1192 mm)
Aspect Ratio	16:9				
Panel Type/Backlight	IPS / Direct-LED				
Resolution (H x V)	1920 x 1080				
Brightness	700 cd/m ²				500 cd/m ²
Contrast Ratio	1200 : 1				1400 : 1
Dynamic Contrast Ratio	500000 : 1				
Response Time	8.0 ms (G to G)				12 ms (G to G)
Viewing Angle (Horizontal/Vertical)	178 °/178 ° (CR ≥ 10)				
Panel Surface Treatment	Anti-Glare (Haze 44 %)		Anti-Reflection		Anti-Glare (Haze 10 %)
CONNECTION TERMINAL					
VIDEO IN	BNC x 1 (Shared with COMPONENT Y/G)		BNC x 1 (Shared with COMPONENT Y)		
AUDIO IN	Pin Jack (L/R) x 1 Set (Shared with COMPONENT/RGB IN)	Pin Jack (L/R) x 1 Set (Shared with COMPONENT IN)	Stereo Mini-Jack (M3) x 1 (Shared with COMPONENT/RGB IN)	Pin Jack (L/R) x 1 Set (Shared with COMPONENT IN)	
HDMI IN	HDMI Type A Connector x 1		HDMI Type A Connector x 2		HDMI Type A Connector x 1
COMPONENT IN	—	BNC x 1 Set (Shared with VIDEO IN)	—	BNC x 1 Set (Shared with VIDEO IN)	
AUDIO IN	—	Pin Jack (L/R) x 1 Set (Shared with VIDEO IN)	—	Pin Jack (L/R) x 1 Set (Shared with VIDEO IN)	
COMPONENT/RGB IN	BNC x 1 set (Shared with VIDEO IN)	—	BNC x 1 (Shared with VIDEO IN)	—	
AUDIO IN	Pin Jack x 1 set (Shared with VIDEO IN)	—	Stereo Mini-Jack (M3) x 1 (Shared with VIDEO IN)	—	
DVI-D IN	DVI-D 24-pin x 2		DVI-D 24-pin x 1		
AUDIO IN	Stereo Mini-Jack (M3) x 1 (Shared with PC IN)		Stereo Mini-Jack (M3) x 1 (Shared with PC IN)		
DVI-D/DVI-I OUT	—		DVI-D 24-pin x 1 (DVI Revision 1.0 Compliant, Compatible with HDCP 1.1)		DVI-I 29-pin x 1
DisplayPort IN	DisplayPort x 1 (DP1.1)*1		—		
PC IN	Mini D-sub 15-pin x 1 (Female)				
AUDIO IN	Stereo Mini-Jack (M3) x 1 (Shared with DVI-D IN)				
USB	USB Type A Connector (DC 5 V/0.5 A) x 1 (USB 3.0 Not Supported)	USB Type A Connector (DC 5 V/0.5 A) x 1 (Memory Viewer Only, USB 3.0 Not Supported)	USB Type A Connector (DC 5 V/1 A) x 1 (USB 3.0 Not Supported)		—
AUDIO OUT	Stereo Mini-Jack (M3) x 1		Stereo Mini-Jack (M3) x 1		Pin Jack (L/R) x 1 Set
SERIAL	D-sub 9-pin x 1 (Input) / D-sub 9-pin x 1 (Output), RS-232C Compatible				
DIGITAL LINK IN/OUT	RJ45 x 1 (IN) (Shared with LAN IN) / RJ45 x 1 (OUT) (Shared with LAN OUT)		—		
LAN	RJ45 x 1 (IN) (100BASE-TX, Compatible with PLink™, Shared with DIGITAL LINK IN) / RJ45 x 1 (OUT) (100BASE-TX, Compatible with PLink™, Shared with DIGITAL LINK OUT)		RJ45 x 1 (IN) (100BASE-T/100BASE-TX, Compatible with PLink™)		RJ45 x 1 (IN) (Web Browser Control Only)
IR IN/OUT	Stereo Mini-Jack (M3) x 1 (Input) / Stereo Mini-Jack (M3) x 1 (Output)				
SPEAKER					
External Speaker Out	8 Ω, 20 W (10 W + 10 W) (10 % THD)				
ELECTRICAL					
Power Requirements	110-127 V AC, 50 Hz/60 Hz / 220-240 V AC, 50/60 Hz				
Power Consumption	300 W	330 W	300 W (U) / 290 W (W)	220 W (U) / 210 W (W)	160 W
On Mode Average Power Consumption*2	120 W	168 W	142 W	108 W	65 W
Standby Condition	Approx. 0.5 W				
MECHANICAL					
Dimensions (W x H x D)	1212 x 683 x 99 mm (47.7" x 26.9" x 3.9")		1213 x 684 x 95 mm (47.8" x 26.9" x 3.7")		1045 x 590 x 109 mm (41.2" x 23.3" x 4.3")
Bezel Width	0.9 mm (0.036")		2.25 mm (0.088") [Left/Top], 1.25 mm (0.049") [Right/Bottom]		3.2 mm (0.12") [Left/Top], 1.7 mm (0.07") [Right/Bottom]
Weight	Approx. 25.0 kg (55.1 lbs)		Approx. 30.0 kg (66.1 lbs)		
Wall-Hanging Pitch	VESA Compliant 400 x 400 mm (15.8" x 15.8")				
Installation*3	Orientation: Landscape/Portrait, Angle: Vertical Only				
ENVIRONMENTAL					
Operating Environment	0 °C to 40 °C (32 °F to 104 °F)*5 / 0 °C to 35 °C (32 °F to 95 °F)*6		0 °C to 40 °C (32 °F to 104 °F)*4		0 °C to 40 °C (32 °F to 104 °F)*4
10 % to 90 % (Non-Condensation)					

*1 Compatible with HDCP. Dual Mode only. *2 Based on IEC 62087 Ed2 measurement method. *3 Please consult your dealer if installation conditions differ to those specified. *4 For up to 2000 m (6562 ft) altitude. *5 For up to 1400 m (4593 ft) altitude. *6 For between 1400 m (4593 ft) and 2800 m (9186 ft) altitude.



For more information about Panasonic professional displays, please visit:
Global Website – panasonic.net/prodisplays
YouTube – www.youtube.com/PanasonicProDisplay

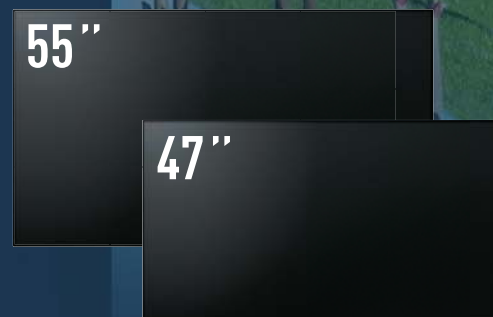
Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. HDBase™ is a trademark of the HDBaseT Alliance. All other trademarks are the property of their respective trademark owners. Images on screen are simulated. © 2016 Panasonic Corporation. All rights reserved.

All information included here is valid as of October 2016.

CT16-G01PF-Video Wall Printed in Japan.

Panasonic BUSINESS

LCD Video Wall Series



55-inch TH-55VF1H

55-inch TH-55LFV70
55-inch TH-55LFV60
55-inch TH-55LFV6

47-inch TH-47LFV5

Multi-screen Installation Simplified for Signage, Events, and Surveillance

Panasonic's close relationship with end users and the resale industries has enabled development of specialized turnkey video-wall solutions that exceed the demands of professionals by streamlining installation, safeguarding reliability, and enhancing performance around the clock. Serving high-impact images, the VF1H, LFV70, LFV60, LFV6, and LFV5 Series assure high visibility and ease of operation unrivalled by any other brand.



For Every Challenge, an Innovative Solution

“Make multiple screens look like a single screen.”



Developed VF1H Series with 1.8 mm Bezel-to-Bezel Width → P.4

“Extend life and make brightness uniform.”



Developed Auto Brightness Adjustment for VF1H Series → P.6

“Prevent video image misalignment where panels meet.”



Developed Frame Control / Reverse Scan Function → P.5

“Guarantee image display if the primary connection fails.”



Developed a Failover and Failback System → P.6

“Make it quicker, easier, and cheaper to install.”



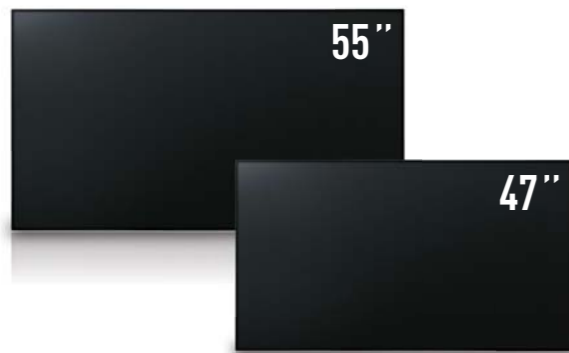
Developed DIGITAL LINK and Modular Mounting Frame → P.7

“Save me on calibration and maintenance.”



Developed Video Wall Manager Software and Auto Display Adjustment Upgrade Kit → P.7

Panasonic LCD Video Wall Series Lineup



NEW	55-inch	TH-55VF1H	700 cd/m²	1.8 mm	Anti-Glare
	55-inch	TH-55LFV70	700 cd/m²	3.5 mm	Anti-Glare
	55-inch	TH-55LFV60	700 cd/m²	3.5 mm	Anti-Reflection
	55-inch	TH-55LFV6	500 cd/m²	3.5 mm	Anti-Glare
	47-inch	TH-47LFV5	500 cd/m²	4.9 mm	Anti-Glare

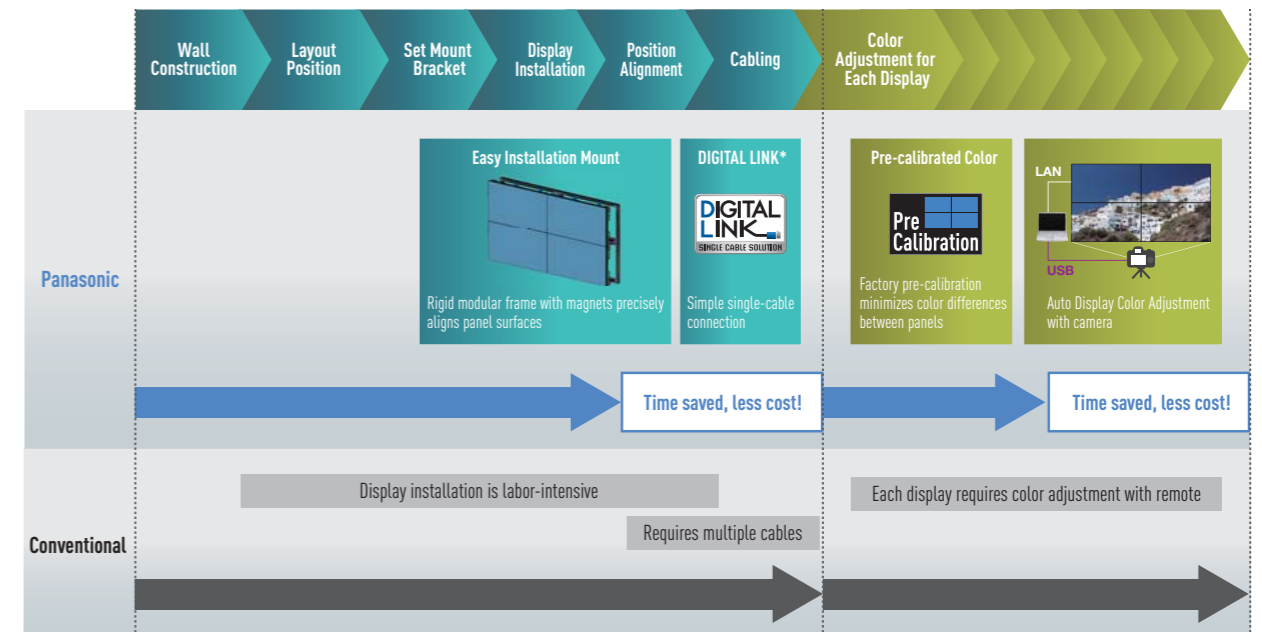


Panasonic LCD Video Wall Series Feature Comparison

	Page	TH-55VF1H	TH-55LFV70	TH-55LFV60	TH-55LFV6	TH-47LFV5
Screen Size	P.2	55"	55"	55"	55"	47"
Panel Brightness (cd/m²)	P.2	700	700	700	500	500
Panel Surface Treatment	P.4	AG (Haze 44 %)	AG (Haze 44 %)	AR	AG (Haze 10 %)	AG (Haze 10 %)
Bezel-to-Bezel (mm)*	P.4	1.8	3.5	3.5	3.5	4.9
24/7 Operation	P.6	✓	✓	✓	✓	✓
Portrait	P.6	✓	✓	✓	✓	✓
Multi Screen	P.5	10 x 10	10 x 10	10 x 10	10 x 10	5 x 5
Local Dimming	P.4	✓	✓	✓	✓	✓
Frame Control / Reverse Scan	P.5	✓	-	✓	✓	-
Failover / Failback	P.6	✓	✓	✓	✓	-
DIGITAL LINK	P.7	✓	✓	-	-	-
USB Media Player	P.4	✓	✓	✓	✓	-
Early Warning Software	P.6	✓	✓	✓	✓	-
Video Wall Manager Software (Free) and Auto Display Adjustment Upgrade Kit (Optional)	P.7	✓	✓	✓	✓	✓
Multi Monitoring & Control Software (Free)	P.4	✓	-	✓	✓	-

* Bezel-to-bezel distance refers to the combined top and bottom (or left and right) bezel-width of adjacent displays in video-wall configuration. The gap between displays is not included.

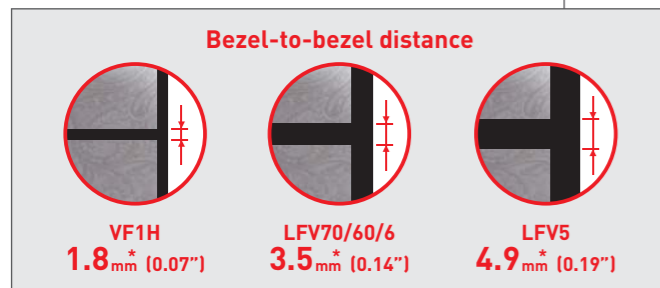
From Unboxing to Operation: Where You Save



* VF1H/LFV70 only. Note: optional accessories are required for installation and calibration.

Narrow Bezel for Impressive Video Walls NEW

Narrow frames on Panasonic's LCD Video Wall Series reduce bezel-to-bezel distance to a near-invisible 1.8 mm*. Even when viewed close-up, screen borders are almost indiscernible, resulting in truly spectacular large-format images.



* Bezel-to-bezel distance refers to the combined top and bottom (or left and right) bezel-width of adjacent displays in video-wall configuration. The gap between displays is not included.

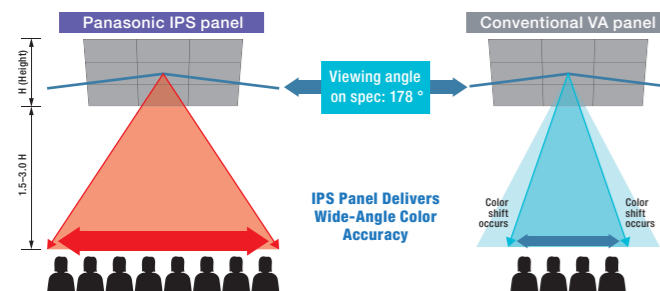
IPS Panel Improves Off-Axis Visibility

High-resolution IPS (In-Plane Switching) panel technology ensures that pictures displayed on screen remain clearly visible even when observed from oblique angles: vital for signage applications as well as in control rooms where clear visibility is necessary at all times.



Wide-Angle Color Accuracy

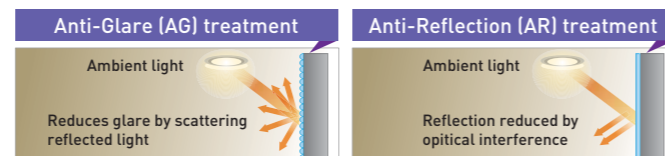
Panasonic IPS panel preserves true color accuracy for a wider proportion of the specified 178-degree viewing angle than conventional VA panels. Passersby are exposed to the image's full impact for longer in signage situations.



Note: Graphic is simulated. Visibility depends on environment.

Anti-Glare (AG) and Anti-Reflection (AR) Surface Treatments

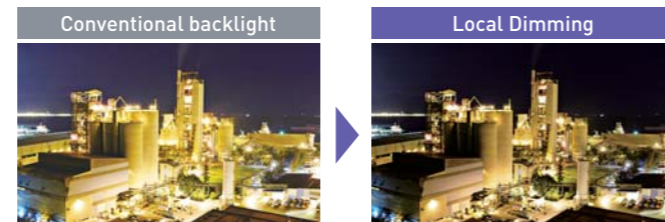
The AG layer on LCD Video Wall Series displays (except the LFV60) scatters reflected natural or artificial light, improving visibility. In particular, the AG treatment enhances screen clarity in surveillance stations and public facilities. The LFV60 Series, meanwhile, features an AR surface treatment that reduces reflection by optical interference, and is suitable for retail signage installations.



Backlight Optimization Improves Contrast

Highly efficient direct-lit LED backlighting with Local Dimming assures high 500,000:1 contrast performance. Backlight brightness is automatically optimized to deepen blacks in dark areas and boost whites in light areas of individual scenes displayed on screen for more realistic and immersive picture quality.

Local Dimming Function



Black is reproduced as dark grey, and details are lost in shadows.

Backlighting is optimized for specific areas of the image, resulting in deeper blacks.

Note: Local Dimming on VF1H and LFV Series is always set.

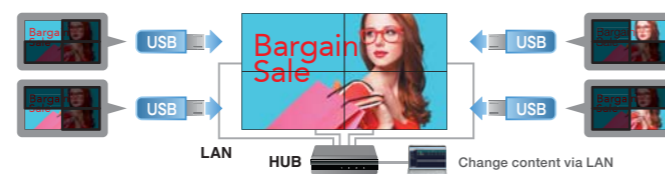
Multi-Screen Image Syncing via USB and Media Updates via LAN



The Panasonic LCD Video Wall Series (except LFV5) is adapted to digital signage—just connect USB memory devices to inputs on each display in 2 x 2 multi-screen configuration for automatically synchronized 4K (4 x 1080p) images. No external devices or processors are required. This function also serves as a backup in case the primary video source fails. Multi Monitoring & Control Software*1 allows media to be written to USB memory via LAN*2, perfect in situations where the display is difficult to access.

*1 For more information about Multi Monitoring & Control Software, please visit: <http://panasonic.net/prodisplays/download/software/index.html>

*2 Replacing content stored on USB memory device via LAN is available on VF1H and LFV60/6 Series displays only.

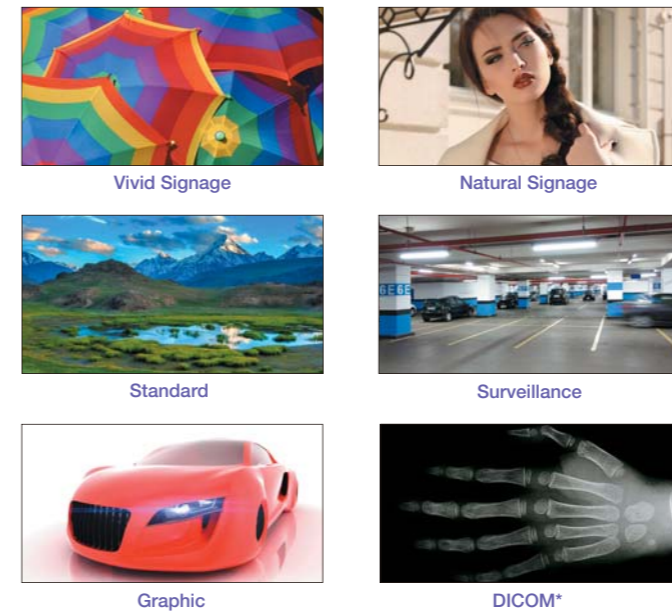


Note: Connection example for VF1H Series shown.

Optimized Image Modes



Conventional display panels usually include basic display mode presets such as Standard and Dynamic. The Panasonic LCD Video Wall Series (except the LFV70/5 Series), however, features an extensive selection of display modes to suit specific content, video sources, and lighting environments to achieve optimal performance.



* DICOM simulation only. Do not use for actual medical examinations or diagnosis.

High-Performance Imaging Engine



Color and image quality can be fine-tuned and customized to assure natural uniformity across all displays in multi-screen configuration.

Color matching function

Corrects any unevenness in color between multiple screens. R (red), G (green), and B (blue) along with intermediate colors (cyan, magenta, and yellow) are corrected individually on each display.

Color enhancement

Displays images with enhanced color intensity.

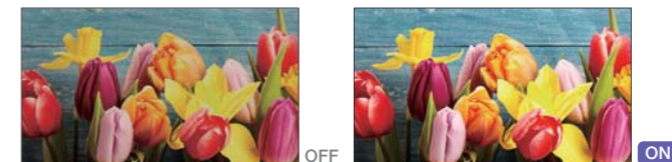
Refine enhancer

Corrects blurry image contours that result from resizing to improve resolution.

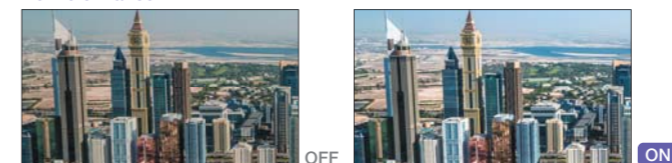
Gradation smoother

Extracts and eliminates noise components from input video signals for noise-free image reproduction.

Color enhancement



Refine enhancer



Note: Graphic is simulated.

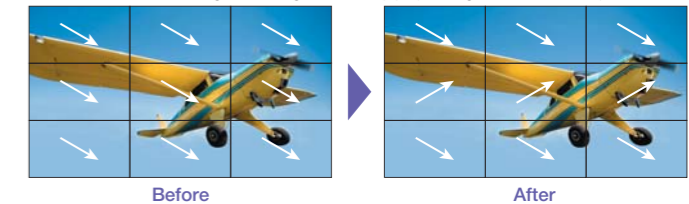
Improved Multi-Screen Video Visibility



When high-speed video is played on multiple screens in a video wall, some image misalignment can occur between vertically adjacent panels. VF1H and LFV60/6 Series feature a Reverse Scan Function that alternates the scanning direction of vertically adjacent displays to improve image alignment. Frame Control Function, meanwhile, adjusts the number of video frames displayed to reproduce images with natural fluidity.

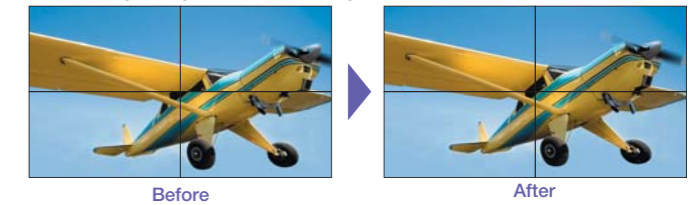
Reverse Scan Function

Reverses direction of image scanning to smoothly play enlarged video on multiple screens.



Frame Control Function

Adjusts timing of images to reproduce enlarged video more naturally.

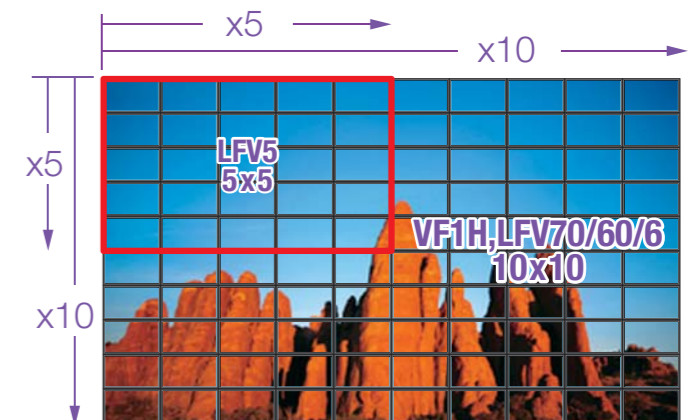


Note: Graphic is simulated. Arrows show scanning direction during video playback.

Multi-Screen System for High-Impact Images in Large Spaces

Multi-Display Function enlarges images to up to 100 times their original size*. It can increase image size using the same zoom ratio in both vertical and horizontal directions to suit 2 x 2, 3 x 3, 4 x 4, 5 x 5, and 10 x 10 video-wall configurations (10 x 10 is supported on all displays except the LFV5), or can apply different ratios to suit alternative screen layouts. In this way, users can maximize image size according to video-wall size and shape.

* LFV5 enables up to 5 x 5 zoom. Up to 2 x 2 zoom is available with media input via USB for VF1H and LFV60/6. USB input for LFV70 does not support multi-screen functionality.



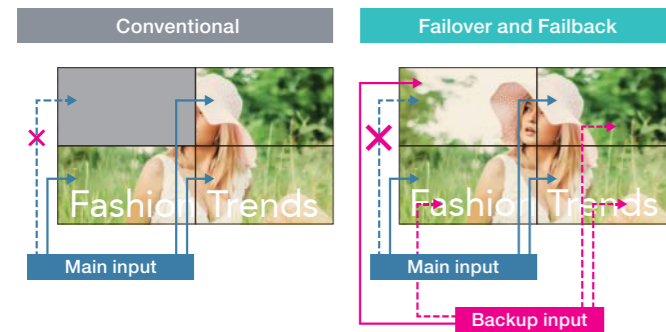
Note: A mounting bracket compliant with VESA standards is required for wall-mounting. Some degradation occurs when images are enlarged. Be sure to provide adequate ventilation as operating temperatures can vary according to multi-screen configuration and environment.

Failover and Failback Safeguards Maintain Image Display

VF1H LFBV70
LFBV60 LFBV6

Digital signal inputs comprise one or two DVI-D terminals together with HDMI, DisplayPort*, DIGITAL LINK*, and USB inputs. If the primary audio-video signal is interrupted, the display immediately switches to an alternative input. When the primary signal is recovered during backup display, the original image is restored automatically. This makes the Panasonic LCD Video Wall Series*2 ideal for use in control rooms and in other applications where uninterrupted playback is essential.

*1 DisplayPort available on LFBV70 only. DIGITAL LINK available on VF1H and LFBV70 only.
*2 LFBV5 does not feature backup signal function.



If AV signals via the primary input is interrupted, images are no longer displayed.

If the primary AV signal is interrupted, the system automatically switches to a backup input so video display is maintained.

Note: Possible combinations of main/backup input signals are limited. For details, please visit the Panasonic website.

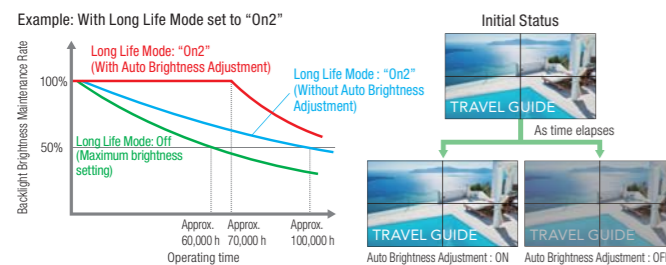
Delivers Stable Brightness for Up to 8 Years*

NEW VF1H

The VF1H Series incorporates Long Life Mode and a new Brightness Adjustment Function. In Long Life Mode, backlight brightness is optimized to extend product life. Auto Brightness Adjustment Function corrects light output automatically according to the rate of backlight deterioration to maintain constant brightness for longer.

* Figure is approximate when operating continuously for 24 hours x 365 days.

Long Life Mode & Auto Brightness Adjustment Function



Note: Assuming operating conditions of 25 °C (± 2 °C). Environmental conditions and conditions of usage may affect brightness longevity and operating period. "On2" delivers approximately 60 % maximum specified backlight brightness. Auto Brightness Adjustment cannot be turned on if panel illumination period has exceeded 1,000 hours.

Note: Images and graphs are simulated.

Efficient 24/7 Reliability in Landscape or Portrait Modes

Durable panel materials and quality components ensures dependable 24-hour operation seven days a week. This makes the Panasonic LCD Video Wall Series ideal for applications where absolute reliability is critical. Further, these products are designed for either landscape or portrait orientation without affecting color, brightness, or operational life. This flexibility allows you to exploit installation space to fullest potential.

Note: Display of moving images is recommended when panels are in use for long periods to prevent image retention. Note that image burn-in can be gradually rectified with the periodical display of moving images.



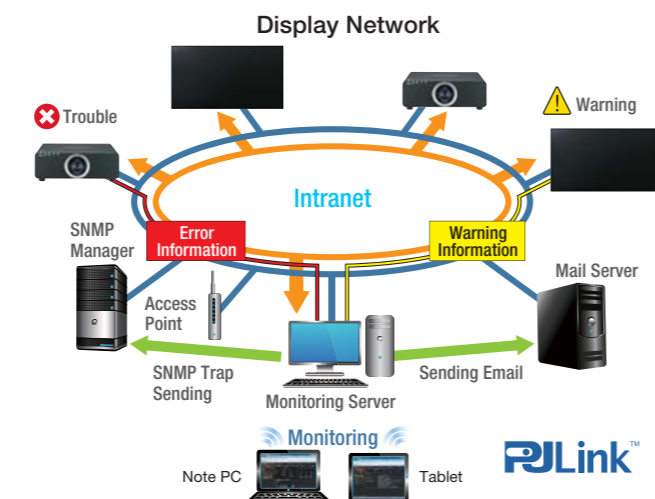
Minimize Downtime and Improve Efficiency

VF1H LFBV70
LFBV60 LFBV6

Optional ET-SWA100 Series* Early Warning Software monitors all display devices over the network. Administrators can monitor device status in real time, view operation history, and receive alerts if abnormalities are detected. Monitoring servers with this software installed can be checked via tablet or notebook PC browser. As well as minimizing downtime, the software reduces unnecessary visits to remote display sites and saves service time and cost.

* Part number suffix may differ depending on the license type. Note that some potential device failures cannot be predicted.

Early Warning Software (Status Screen)



For more information about Early Warning Software and our **free 90-day software trial*** promotion, please visit: <http://panasonic.net/prodisplays/products/et-swa100/>

* Available with software version 2.1 or later.

DIGITAL LINK Simplifies Installation at Lower Cost

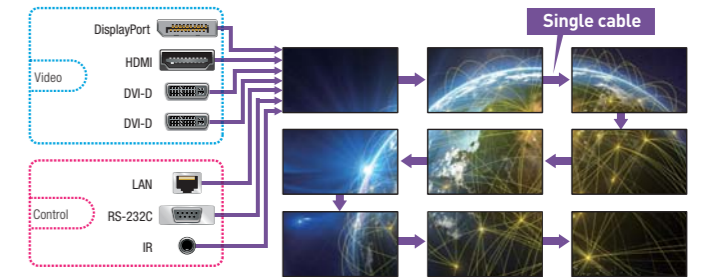
VF1H LFBV70

Based on HDBaseT™ technology, the DIGITAL LINK connection on VF1H and LFBV70 Series displays supports audio, video, and control signal transmission over long distances, and can also be used to daisy-chain multiple displays via a single cable. This eliminates the need for video splitters and other routing devices. The LFBV60/6/5 Series, meanwhile, supports daisy chain via DVI with separate video and control (serial or IR) connections.



Note: CAT5e or higher STP cable required.

DIGITAL LINK Reduces Cabling Cost and Installation Complexity



Combines AV and Control Signals

Save time and money with Panasonic's simplified DIGITAL LINK connection.

Factory-matched and Pre-calibrated Color

Colors are pre-calibrated at the factory prior to shipment in order to minimize color differences between panels intended for multi-screen installation. This makes it possible to create realistic images without any visible color differences from panel to panel*.



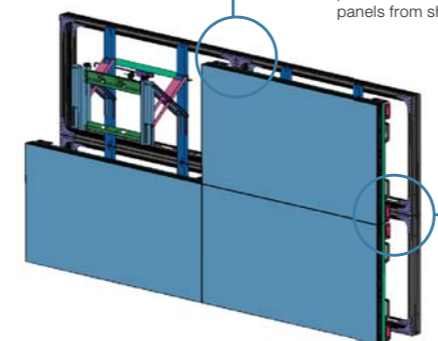
* In some cases, visual adjustment may be necessary.

Precision Video-Wall Mounting System

Optional Installation Mount makes setting up a spectacular video wall comparatively quick and painless. As well as saving time and reducing labor cost, the rigid mount also eliminates potential panel-surface alignment inconsistencies with the use of an automatic magnet system. The Panasonic LCD Video Wall Series also features optional cover frames for extra protection against impact.

The rigid modular display frames interconnect and eliminate the need for manual bezel alignment.

A system of magnets ensures consistency between multiple panel surfaces and prevents the panels from shifting over time.



Inconsistencies in the video wall display can occur when individual panel bezels are not correctly aligned vertically and horizontally, and when panel surfaces are not properly adjusted. Surface alignment control magnets and interlocking mounts ensure precision installation in every axis.

Video Wall Manager Software and Auto Display Adjustment Upgrade Kit

Panasonic's free Video Wall Manager software can be used with LCD Video Wall Series displays. With this software, you can calibrate display color using a color sensor, adjust display settings, and control and manage data via PC. If software is upgraded with an optional TY-VUK10 Auto Display Adjustment Upgrade Kit, brightness and color among multiple displays can be automatically calibrated using a compatible camera (Nikon D5200/D5300/D5500)*.



* Available only with normal zoom lens: AF-S DX NIKKOR 18-55 mm f/3.5-5.6G, AF-S DX NIKKOR 18-140 mm f/3.5-5.6G ED VR, AF-S DX NIKKOR 18-55 mm f/3.5-5.6G VR II

With LFBV70 and TY-VUK10 connected



Video Wall Manager / TY-VUK10 Specification

Basic Software (FREE)	
Name	Video Wall Manager
Download	Free (Login and download from PASS)
Functions	Calibration / adjustment, control of display setting / data control
Target Models	Panasonic Video Wall LCD Display: TH-55VF1H, TH-55LFV70, TH-55LFV60, TH-55LFV6, TH-47LFV5
OS	Windows 7, 8, 8.1, 10
Supported Color Sensor	Konica Minolta: CA-210, CA-310 Datacolor: Spyder4, Spyder5 X-rite: i1Pro2
Connection	RS232C, LAN (VF1H, LFBV70/60/6 only)
Max. Number of Displays	100 units (VF1H, LFBV70/60/6), 25 units (LFBV5)
Auto Display Adjustment Upgrade Kit (TY-VUK10)	
Function	Automatic color adjustment using camera
Requirement	Video Wall Manager Software
Activation	License key is required per PC
Supported Camera	Nikon D5200, D5300, D5500 with normal zoom lens: AF-S DX NIKKOR 18-55 mm f/3.5-5.6G, AF-S DX NIKKOR 18-140 mm f/3.5-5.6G ED VR, AF-S DX NIKKOR 18-55 mm f/3.5-5.6G VR II
Max. Number of Displays	25 units (5 x 5)



PASS Website – panasonic.net/prodisplays/pass
Register your display to activate the upgrade kit and get what you need.

Free 90-day Trial for Early Warning Software

Please visit the PASS website to download a free 90-day trial version of ET-SWA100 Early Warning Software and test its capabilities for yourself. Up to 2,048 displays can be monitored simultaneously.